Ore Deposits

The ore minerals are metacinnabar and cinnabar that occur filling fractures and shear zones in the silica-carbonate rock and, to a lesser degree, as disseminations throughout the serpentine and silica-carbonate rock. Apparently the shales immediately above and below the silica-carbonate rock formed an impermeable barrier to the ore-bearing solutions for the enclosing sediments are barren. The main ore shoot was on the fault along the south side of the open pit which forms the contact between silica-carbonate rock and underlying sediments. However, mineralization was not limited to this lower contact and ore bodies were present along other shears in silica-carbonate rock. Ore mined during the 1936-1947 period from the Mill workings averaged 10 pounds of mercury to the ton.

Metacinnabar is the predominant ore mineral in the Mill workings whereas cinnabar forms the ore in the old mines at the western end of the property. Marcasite and pyrite occur in the silica-carbonate rock and some stibnite is also present. The rich ore-bodies encountered in the past are said to have been closely associated with massive iron sulphides. Mineralization is believed to have taken place in Tertiary time for some cinnabar was reported 1/ to have been found along the contact of Tertiary andesite and Cretaceous shales about one mile to the east of the mines.

Exploration

In his original DMEA application, Mr. Smith proposed todrive a 700-foot drift under the Mill Workings from the east to connect with the 270 level. He also proposed a second phase of work to explore the old mines at depth by drifting an additional 1300 feet westerly.

The U. S. Geological Survey conferred with the operator and suggested that a more efficient program could be carried out by sinking a shaft, then driving exploratory drifts and crosscuts from the bottom.

C. N. Sohuette, consulting engineer for Mr. Smith, submitted a new application requesting 75 percent Government participation in a $125,050 program. The new proposal,in two parts, is as follows:

Phase 1. Sink a 330 foot shaft from a point 90 feet north of the new stack and then explore by 625 feet of drifting and crosscutting the ground 100 feet below the lowest mine level.

Phase 2. (To follow upon successful completion, and review by the Government and operator, of phase 1.) Drift northwesterly 1300 feet to explore the old Jones tunnel area at depth.

1/Turner, H. S., Geology of Mt. Diablo, Bull. GSA 2:391-2, 1890

(Breakdown of cost figures are to be found in the application with Form MP-103). The application states that the work will be contracted out at $135.00 per foot for sinking and $35.00 per foot for drifting and crosscutting. With the added cost of engineering, geology, assays, etc., the first phase would cost $73,050 and be completed in seven months, while the second phase, taking nine months, would cost an additional $52,000. Total cost of the project would be $125,050.

The first part of the revised application appears to offer the best means of exploring the ore deposit. The advantages of sinking a shaft at the proposed site rather than drifting in from the east are numerous, some of which are: 1 - it would be sunk in ground underlain by sediments, mainly sandstone, that have greater strength than the fracture and altered rocks over the ore body; 2 - it would explore new ground 100 feet below any existing workings; 3, waste would be dumped at no greater distance than 300 feet from the shaft, either into the open pit or just north of the ridge; 4, it would have the advantage of elevation as the collar would be higher than the mill; 5 - it would be only 60 feet from the existing grizzly, ore bin, and conveyor belt to the mill.

On the basis of cross section A-A', about 200 feet of crosscutting S. 24° W. from the bottom of the shaft, will be necessary to reach the main ore zone leaving some 425 feet of tunneling to be used in drifting on the mineralized fault zone. The log of drill hole no. 8, projected 120 feet to plane of section A-A', reports only 12 feet of silica-carbonate rock at the 447 foot mark. However, a cursory examination of the core proved that almost 40 feet of silica-carbonate rock is present below the 300-foot marker. The core is not complete; therefore, more silica-carbonate rock might be encountered than has been proved. Some cinnabar was observed in the core and it was reported that some eight-pound ore was cut -- probably in the missing section of core -- in this hole. Also, assays made from the mineralized zone in the winze below the 165 level (see enlarged portion of section A-A') show that good ore does occur below the lowest level of caved workings.

The second phase of the project would appear to offer less hope for discovering ore. Surface mapping and the logs of two old diamond drill cores indicate that there are about 600 feet of barren Franciscan sediments between the northwest end of the drift proposed in phase one and the first possible ore-bearing rocks to the west.

The Government's share of $73,050 for phase one will be $54,787 Under the 5 percent repayment schedule, and providing that the price of mercury does not drop, production of 4,980 flasks with a gross value of $1,095,740 would be necessary for the Government to recover it's share of the cost. It seems possible that at least half of the necessary ore might be found above the proposed level, but the additional ore would have to be found below the proposed level. Phase two, with a total cost of $52,000 would cost the Government $39,000 and require the production of 3,545 flasks with a gross value of about $780,000 for repayment of the loan.

Recommendations and Conclusions

At the present market price of mercury, phase one could conceivably pay it's way while phase two offers less promise of being able to repay the loan. The application for exploration under phase one is recommended. Exploration under phase two should be dependent upon the success of phase one, as the added exploration would only be worth the high risk involved if the mine were producing from good ore found as a result of the phase one exploration.

EXHIBIT 11

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET No. EA 2449

COMMODITY Mercury

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Docket Copy
IDM-E 544

EXPLORATION PROJECT CONTRACT[1]

Contract

IT IS AGREED this 5th day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ronnie E. Smith, Tower Petroleum Bldg., Dallas, Texas, Jene Harper, c/o Franklin Supply Co., Chicago, Illinois, and James F. Dunnigan, Chicago, Illinois - Partners

hereinafter called the "Operator," as follows: and as set forth in Annex I and Annex III.

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of California, County of Contra Costa, described as follows:[3] The N½ of the S½ and the S½ of the SW¼ of the NE¼ of Sec. 29, T. 1 N., R. 1 E., Mount Diablo Base and Meridian, Reserved Feb. 1, 1934 (File No. 1660), except for area described in Annex II and shown on map attached hereto, made a part hereof, and entitled "U.S.G.S. Bulletin 922-Plate 6, DMEA-2482,"

the Operator represents and undertakes:[4]

(a) ~~That the Operator is the owner or possession taken thereto, possession and that the property is subject only to the following claims, liens, or encumbrances, to which the subordination or consent of the holders is attached:~~

(b) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 45 days from the date of this contract shall commence work on a project of exploration for[5] Mercury

in or upon the described land; and shall bring the project to completion within a period of 10 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(b) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(c) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(a) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological tants), a schedule of which is included in the estimate or costs set forth in Exhibit "A." The requirements and related ted costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related ~~initial~~ allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—Repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance and payroll taxes.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

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[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

16—36328-2

(*b*) The Government's payment in all cases shall be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowance maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes) or any other indirect costs, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve such records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

Contract

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 75 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $55,178.25, which is 75 percent of $73,571.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided*, that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows: See Amer. III, substituted for that part of 9(a) preceding the colon.

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* ----------

Executed in sextuplicate the day and year first above written.

Partner

Partner

Partner

THE UNITED STATES OF AMERICA

By [signature]
Administrator, Defense Minerals Exploration Administration

I, [signature], certify that I am the secretary of the corporation named as Operator herein; that [signature], who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

U. S. GOVERNMENT PRINTING OFFICE 16—60328-1

[CORPORATE SEAL]

EXPLORATION PROJECT CONTRACT
RONNIE B. SMITH
DOCKET NO. DMEA-2448

ANNEX I

Materials and Supplies. For the purpose of determining the Government's interest in materials or supplies remaining upon any termination of the work, they shall be considered in groups or categories (such as pipe, or explosives, or rails, or drill steel), and if the original cost of the remaining unexpended portion of any such group or category exceeded $50, the Government shall have an interest therein as provided in Article 11 of the contract form.

Equities in Equipment. Unless expressly permitted by provisions in Exhibit "A", the operator shall not procure equipment or any other item under a rental-purchase agreement, an installment-purchase agreement, any agreement which creates or builds up an equity or interest in the thing procured which can be converted to legal title only by further payment or some other consideration, or any agreement other than for straight rental or cash purchase and delivery.

Preservation of Property. Until the final disposal of any equipment or other property in which the Government has an interest or equity, the operator shall preserve and protect same for the mutual best interests of the parties, any reasonable and necessary cost thereof to be treated as an allowable cost of the exploration work to which the Government will contribute.

EXPLORATION PROJECT CONTRACT
RONNIE B. SMITH
DOCKET NO. DMEA-2448

ANNEX II

The land referred to in Article 2 as exempted from the lease from Mount Diablo Quicksilver Company to Ronnie B. Smith is shown on map "Bulletin 922-Plate 6, DMEA-2448" and is described as follows:

Beginning at the NW corner of the NW¼ of the SE¼ of Sec. 29, T. 1 N., R. 1 E., Mount Diablo Base and Meridian, thence running southerly along the dividing line between the NE¼ of the SW¼ and the NW¼ of the SE¼ of said Sec. 29, a distance of 20 chains to the SW corner of the NW¼ of the SE¼ of Sec. 29; thence running along the southerly line of the NW¼ of the SE¼ of Sec. 29, a distance of 2.924 chains; thence leaving said line and running in a northerly direction a distance of 20.23 chains; thence westerly to the point of beginning.

ANNEX

The following provisions are in lieu of all of paragraph (a) of Article ___ which precedes the colon:

If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account required by the exploration project contract, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development. The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land which is the subject of the exploration project contract, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, as follows:

EXPLORATION PROJECT CONTRACT
RONNIE B. SMITH
DOCKET NO. DMEA-2448

EXHIBIT "A"

Description of the Work

The objective of the project is to explore the subject property for mercury ore. The geological details, and the site and purpose of the shaft, are shown on USGS map attached hereto and entitled "Mount Diablo Mine, Contra Costa County, California" dated January 1953. As indicated on the "Bulletin 922-Plate 6, DMEA-2448," the work consists of the following:

1. Level shaft site, erect a headframe with ore pocket, install an electric hoist (including motor, starter, head sheave, and hoisting cable), and build tram from headframe to dump.

2. Sink a 2-compartment timbered shaft (in cross section 4 feet by 8.5 feet in clear of timber) to a depth of 330 feet.

3. At a distance approximately 300 feet below the collar of the said shaft, drive a crosscut approximately 200 feet (in cross section 6 feet by 7.5 feet in clear of timber) in a southerly direction through the vein structure on the hanging wall of the fault; and from the sides of the crosscut, drift (in cross section 6 feet by 7.5 feet in clear of timber) in opposite directions along the strike of the fault for approximately 425 feet.

The total advance of the crosscuts and drifts shall not exceed 625 feet, and the location of shaft, crosscut, and drifts shall be subject to Government approval.

4. Samples of vein material encountered during the exploration shall be cut by the Consulting Engineer and they shall be assayed for mercury content, the place of sampling and assaying being subject to Government approval. The Consulting Engineer must also be approved by the Government, and shall direct the entire exploration program and prepare all reports required under the contract.

Estimated Costs of the Project
(*Indicates allowable maximum)

(1) Independent Contracts

Sinking 2-compartment shaft 330 feet @ $121.20/ft.* 1/	$39,996.00*	
Driving crosscut and drifts 625 feet @ $40.00/ft.* 1/	25,000.00*	$64,996.00*

(2) Labor, Supervision, Consultants

1 Consultant @ $500.00/mo., 7 mos.* 2/	3,500.00*

(3) Operating Materials and Supplies

None

(4) Operating Equipment

To be furnished by Operator, when needed, at no cost to the project.

3 Sterling trucks

1 International bulldozer

1 Dodge pickup truck

1 Joy Mfg. Co. wagon drill

3/4-yard Northwest power shovel

1 Ingersoll-Rand compressor

Auxiliary buildings, fuel oil and gas tanks, and loose tools

1/ This includes the cost of all necessary timbering, cost of all supplies, and maintenance and repair of all equipment. All equipment shall be furnished by Independent Contractor except that referred to in Item (4).

2/ This consultant shall be required to spend a minimum of two full days each week on the project, and this includes all his transportation costs.

To be purchased

1 Only 50 H.P. hoist with motor and starter	$2,250.00*	
1 Only 36-inch sheave	125.00*	
750 feet 5/8-inch hoisting cable	200.00*	$2,575.00*

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

Level shaft site, erect headframe, ore bin, tramway to dump (includes cost of all labor, Workmen's Compensation and Employer's Liability Insurance, and Payroll Taxes)	2,000.00*	

(7) Miscellaneous

Assaying 125 samples @ $4.00/sample	500.00

(8) Contingencies

None

* * * * * *

Total Estimated Cost of Project	$73,571.00*
Government Participation @ 75%	$55,178.25*

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of CALIFORNIA, County of CONTRA COSTA described ~~as follows~~ 1/

in a lease dated September 12, 1951, and recorded in book 1048, page 386 official records of said county

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Ronnie Smith, Trustee

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production 3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 135,000.00, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 22nd day of April, 1953.

MT. DIABLO QUICKSILVER CO., LTD. [Seal]

Vic Blomberg [Seal] President

[illegible] [Seal] Vice-President

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

Interior--Duplicating Section, Washington, D. C. 18264

EXHIBIT 12

2-23-54

Bk: 2273

Pg: 191

9013

BOOK 2273 PAGE 191

ASSIGNMENT OF LEASE

RONNIE B. SMITH, Trustee, of Tower Petroleum Building, Dallas, Texas, JENE HARPER, of Chicago, Illinois, and JAMES F. DUNNIGAN, of Chicago, Illinois, hereby assign to JOHN L. JONAS of 166 Los Robles Drive, Burlingame, California, and JOHN E. JOHNSON of 520 South Van Ness Avenue, San Francisco, California, all their right, title and interest in lease dated September 12, 1951, to them from MT. DIABLO QUICKSILVER COMPANY, LTD. a Nevada Corporation for a term of 5 years commencing October 1, 1951.

Dated: ~~December~~ November 1, 1953

Ronnie B. Smith, Trustee

Jene Harper

James F. Dunnigan

MT. DIABLO QUICKSILVER COMPANY, LTD., a Nevada Corporation, hereby consents to the above assignment and releases Ronnie B. Smith, Trustee of all obligation under said lease.

Dated: ~~December~~ January 26th, 1954.

MT. DIABLO QUICKSILVER COMPANY. LTD.

By Vice President

By Harold Bloomberg - Secretary

(Corporate Seal)

In consideration of new lease by MT. DIABLO QUICKSILVER COMPANY, LTD. to JOHN L. JONAS, and JOHN E. JOHNSON executed on November 1, 1953, the above mentioned lease is hereby cancelled.

Dated: ~~December~~ January 20, 1953.

MT. DIABLO QUICKSILVER COMPANY, LTD.

BY Vice President

BY Harold Bloomberg - Secretary

(Corporate Seal)

John L. Jonas

John E. Johnson

Recorded at request of Sidney Lezak
55 min. past 10 A.M. FEB 9 1954
in Book of Contra Costa County Records
Ralph Cunningham, County Recorder.

Recorded as an Assignment and as a
Cancellation of Lease.
Ralph Cunningham-County Recorder
By Recorder

EXHIBIT 13

LEXSEE 280 F SUPP 2D 1094

COEUR D'ALENE TRIBE, Plaintiff, v. ASARCO INCORPORATED; GOVERNMENT GULCH MINING COMPANY, INC.; FEDERAL MINING AND SMELTING CO., INC.; HECLA MINING COMPANY, INC.; SUNSHINE MINING COMPANY, INC.; SUNSHINE PRECIOUS METALS, INC.; and UNION PACIFIC RAILROAD COMPANY, Defendants. UNITED STATES OF AMERICA, Plaintiff, v. ASARCO INCORPORATED, et al., Defendants.

Case No. CV 91-0342-N-EJL, Case No. CV96-0122-N-EJL

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF IDAHO

280 F. Supp. 2d 1094*; *2003 U.S. Dist. LEXIS 16157*; *57 ERC (BNA) 1610

September 3, 2003, Decided
September 3, 2003, Filed

SUBSEQUENT HISTORY: Partial summary judgment denied by, Motion to strike denied by *United States v. Asarco Inc., 392 F. Supp. 2d 1197, 2005 U.S. Dist. LEXIS 35368 (D. Idaho, 2005)*
Modified by, in part, Motion to strike denied by, Motion granted by, Motion to strike denied by, in part, Motion to strike granted by, in part, Reconsideration dismissed by *United States v. Asarco, Inc., 2005 U.S. Dist. LEXIS 44491 (D. Idaho, Aug. 9, 2005)*
Related proceeding at *United States v. Asarco Inc., 430 F.3d 972, 2005 U.S. App. LEXIS 26476 (9th Cir. Idaho, 2005)*

PRIOR HISTORY: *United States v. Asarco Inc., 214 F.3d 1104, 2000 U.S. App. LEXIS 13939 (9th Cir. Idaho, 2000)*

DISPOSITION: Findings of fact; conclusions of law. Order issued.

COUNSEL: [1]** For USA, plaintiff (96-CV-122): Alan G Burrow, US ATTORNEY'S OFFICE, Boise, ID.

For USA, plaintiff (96-CV-122): G Scott Williams, Thomas L Sansonetti, James L Nicoll, Neil Cowie, US DEPT OF JUSTICE, Washington, DC.

For USA, plaintiff (96-CV-122): David F Askman, Mark A Nitczynski, US DEPT OF JUSTICE, Denver, CO.

For USA, plaintiff (96-CV-122): Michael J Zevenbergen, US DEPT OF JUSTICE, Seattle, WA.

For COEUR D'ALENE TRIBE OF IDAHO, plaintiff (96-CV-122): Brian J Cleary, GIVENS FUNKE & WORK, Coeur d'Alene, ID.

For ASARCO, INCORPORATED, GOVERNMENT GULCH MINING COMPANY, INC., FEDERAL MINING AND SMELTING, INC., defendants (96-CV-122): John W Phillips, Michael R Thorp, William D Maer, Felix G Luna, HELLER EHRMAN WHITE & MCAULIFFE, Seattle, WA.

For ASARCO, INCORPORATED, GOVERNMENT GULCH MINING COMPANY, INC., FEDERAL MINING AND SMELTING, INC., defendants (96-CV-122): M Michael Sasser, SASSER & INGLIS, Boise, ID.

For GOVERNMENT GULCH MINING COMPANY, INC., defendant (96-CV-122): Laurence A Silverman, COVINGTON & BURLING, New York, NY.

For HECLA MINING COMPANY, defendant

(96-CV-122): William H Gelles, BALLARD SPAHR ANDREWS & INGERSOLL, Philadelphia, PA.

[2]** For HECLA MINING COMPANY, defendant (96-CV-122): Elizabeth H Temkin, Kristin Tita, TEMKIN WIELGA & HARDT, Denver, CO.

For HECLA MINING COMPANY, defendant (96-CV-122): Albert P Barker, BARKER ROSHOLT & SIMPSON, Boise, ID.

For COEUR D'ALENE MINES CORPORATION, CALLAHAN MINING CORPORATION, defendants (96-CV-122): Eugene I Annis, LUKINS & ANNIS, Spokane, WA.

For COEUR D'ALENE MINES CORPORATION, CALLAHAN MINING CORPORATION, defendants (96-CV-122): William F. Boyd, Coeur d'Alene, ID.

For HECLA MINING COMPANY, ASARCO, INCORPORATED, counter-claimants (96-CV-122): Christina Humway, US DEPT OF JUSTICE, Washington, DC.

For HECLA MINING COMPANY, counter-claimant (96-CV-122): Elizabeth H Temkin, Kristin Tita, Mark A Wielga, TEMKIN WIELGA & HARDT, Denver, CO.

For HECLA MINING COMPANY, counter-claimant (96-CV-122): Albert P Barker, BARKER ROSHOLT & SIMPSON, Boise, ID.

For ASARCO, INCORPORATED, GOVERNMENT GULCH MINING COMPANY, INC., FEDERAL MINING AND SMELTING, INC., counter-claimants (96-CV-122): John W Phillips, Michael R Thorp, HELLER EHRMAN WHITE & MCAULIFFE, Seattle, WA.

For ASARCO, INCORPORATED, GOVERNMENT GULCH MINING COMPANY, INC., FEDERAL MINING **[**3]** AND SMELTING, INC., counter-claimants (96-CV-122): M Michael Sasser, SASSER & INGLIS, Boise, ID.

For USA, counter-defendant (96-CV-122): Alan G Burrow, US ATTORNEY'S OFFICE, Boise, ID.

For USA, counter-defendant (96-CV-122): Owen F Clarke, Jr, OFFICE OF ATTORNEY GENERAL, Spokane, WA.

JUDGES: EDWARD J. LODGE, UNITED STATES DISTRICT JUDGE.

OPINION BY: EDWARD J. LODGE

OPINION

[*1100] ORDER

I. INTRODUCTION

A. Nature of Case

While there is ample room for disagreement on the facts and the law as it is to be applied to this case, it is undisputed that this case is unique in its size, its history and its complexity. The case is of great importance and calls for the exercise of the greatest care and caution in its consideration, a task that is very difficult when expert witnesses with impeccable qualifications reached opposite conclusions on almost every issue. In *McCarthy v. Bunker Hill & Sullivan Mining & Concentrating Co., 164 F. 927 (9th Cir. 1908)*, cert. denied, *212 U.S. 583, 53 L. Ed. 660, 29 S. Ct. 692 (1909)*, [1] a case heard by the Ninth Circuit in 1908, concerning the issues that were in their infancy on matters pertaining to this very case, the Court **[**4]** commented on the fact that "the briefs also disclosed intense feelings on the part of opposing counsel, which, perhaps is not unnatural in view of all the circumstances of the case and of the large interests involved." *Id. at 939*. It is this Court's opinion that in this regard, nothing has changed.

1 The court refused to grant a permanent injunction to enjoin a lawful business which would necessitate closing mines and mills. The court reasoned the damage from the tailings discharges was small when compared to the livelihood provided directly and indirectly by the mining.

[*1101] The Court allowed the parties sufficient time after the taking of the evidence to negotiate settlements. The Tribe and Asarco reached a settlement. No other settlements were reached. The Court is now prepared to rule on the evidence and law.

After listening to approximately 100 witnesses, 78 days of trial and having reviewed 8,695 exhibits and over 16,000 pages of testimony, it is the judgment of this

Court that while CERCLA **[**5]** was enacted to protect and preserve public health and the environment by facilitating the expeditious and efficient cleanup of hazardous waste sites, the conditions in the Coeur d'Alene Basin have and are improving through the joint efforts of the EPA, the Tribe, the State of Idaho, the private sector (including the land owners) and through the natural recovery of mother nature. The liability of certain responsible parties including Hecla and Asarco is evident, but the Defendants are correct when they argue that there has been an exaggerated overstatement by the Federal Government and the Tribe of the conditions that exist and the source of the alleged injury to natural resources.

To put this case in proper perspective, one has to review the history of over 100 years of mining in the Coeur d'Alene Basin, what efforts were made to deal with the problems as they became evident, what direction the Courts and the State of Idaho legislature gave to interested parties, what contribution, if any, the Federal Government and Tribe made to the conditions, how urbanization, forest fires and floods also impacted the environment, how settlements between certain parties may have changed the landscape **[**6]** and what are the observations and experiences of the people who live in the Coeur d' Alene Basin today.

The industrial revolution has given way to the environmental revolution. In the 1960s, this country began to recognize the importance of taking steps to protect the environment and to curtail or limit the impact of mining for metals necessary for society. It is undisputed that the mining companies in the Silver Valley were impounding their mine tailings by 1968. CERCLA was passed in 1980 and seeks to hold the mining companies liable for many acts that were taken prior to the existence of the statute. The mining companies have attempted to comply with the applicable environmental regulations to minimize the impact of mining. Testimony establishes that Defendants Asarco and Hecla followed the evolving commonly accepted mining practices of the day and even took steps beyond what was required to limit the impact to the environment. Many of these steps were approved by the trial and appellate courts. [2] The economic livelihood provided by mining in the Silver Valley cannot be ignored when considering the legal issues before the Court. Mining provided jobs and materials needed both in **[**7]** times of peace and war.

2 See In *McCarthy v. Bunker Hill & Sullivan Mining & Concentrating Co., 164 F. 927 (9th Cir. 1908)*, cert, denied, *212 U.S. 583, 53 L. Ed. 660, 29 S. Ct. 692 (1909)*; *Luama v. Bunker Hill & Sullivan Mining & Concentrating Co., 41 F.2d 358 (9th Cir. 1930)*.

This Court is charged with upholding the laws of this country. In meeting this charge, the Court must look to the language of the statute and the interpretations by other courts. In the case of CERCLA, the Court's finds its hands are often tied and "justice" is dictated by the statutes passed by politicians who at the time could not have imagined the factual scenario pending before this Court. CERCLA has the well-intended purpose of protecting the health and well being of the environment and its inhabitants. But by the time CERCLA was passed, much of the damage to the environment due to mining in the Coeur d'Alene Basin had **[*1102]** already been set in motion and could not be reversed by the **[**8]** passage of a comprehensive environmental statute. CERCLA is to be liberally construed to achieve its goals, but "we must reject a construction that the statute on its face does not permit and the legislative history does not support." *Carson Harbor Village v. Unocal Corp., 270 F.3d 863, 881 (9th Cir. 2001)*, (en banc), cert. denied, *535 U.S. 971, 122 S. Ct. 1437, 152 L. Ed. 2d 381 (2002)*, (citing *3550 Stevens Creek Assocs. v. Barclays Bank, 915 F.2d 1355, 1363 (9th Cir. 1990))*. Justice and fairness is what is required in this complex case. The Court will apply both these qualities in considering the applicable statutes and the relevant facts.

B. Plaintiffs' Claims

Plaintiff United States seeks to recover from the Defendants for response costs, natural resource damages under CERCLA and for natural resource damages pursuant to the *Clean Water Act* ("CWA"). The Tribe seeks to recover from the Defendants for natural resource damages under CERCLA. [3] The Court will set forth the elements which must be established by a preponderance of the evidence for the Plaintiffs to prevail on each claim.

3 The Court notes that the Tribe and Asarco have reached a settlement in this matter. Accordingly, the Tribe's remaining claims are only against Hecla.

[9]** The elements of a response costs claim under CERCLA: [4]

14. There was no credible evidence shown to establish any injury to the people living in North Idaho resulting from the consumption of fish and birds from the Basin.

15. The 1996 lead level study was the primary reason the Basin-wide RI/FS process was started by the EPA.

16. Cultural uses of water and soil by Tribe are not recoverable as natural resource damages.

E. Trusteeship

1. The federal government has delegated primary duties to control and manage fish and birds to the State of **[**23]** Idaho. Neither the federal government nor the State of Idaho manage or control macro invertebrates, however such are food sources for fish and birds and are presumably managed by the trustee of the birds and the fish.

2. The submerged lands at issue belong to the State of Idaho and the Tribe. The federal government owns very little of the land at issue in the Basin where the mining tailings have come to be located. Most of the land at issue is state land or private property, so the federal government may not be the trustee of such lands. However, the federal government may still have an interest in enforcing the cleanup of such land under CERCLA. [12]

> 12 "Under CERCLA, the cleanup of listed hazardous waste sites must be consistent with the NCP, which is a plan promulgated by the EPA that 'specifies the roles' of the federal, state, and local governments 'in responding to hazardous waste sites, and establishes the procedures for making cleanup decisions.' *United States v. City of Denver, 100 F.3d 1509, 1511 (10th Cir.1996).*" *Fireman's Fund Ins. Co. v. City of Lodi, California, 302 F.3d 928, 949 (9th Cir. 2002).*

[24]** 3. The federal government has jurisdiction over navigable waters in the Basin. Control and management of water quality is performed by both the federal and state governments.

[*1108] F. Response Costs Incurred

1. Response costs due to the injury to water and soil have been incurred by the EPA in the Basin. Specifically, response costs have been established in the form of dollars spent on yard removals of lead contaminated soils in the Basin (and outside the area known as the Box which is covered by a separate consent decree with Asarco and Hecla).

2. EPA study costs related to soil and sediment also qualify as response costs under CERCLA.

G. United States Involvement in the Basin

1. It is undisputed that the United States Government has been involved in many aspects of the Basin.

2. During World War II, the United States government controlled: the price for the metals via the premium price plan and quota system; wages for mining and non-mining personnel; the length of the work week; and approval of capital improvements, equipment and necessary chemicals for processing via the priority system.. The government provided military oversight of the **[**25]** security of the mills and required certain changes be made by the mills for their security. Laborers were restricted by the government from taking other employment and soldiers were offered deferments from military service to work in the mines and mills. The mines and mills were required to submit monthly operating reports to the government. The government provided financing for the exploration of new sources of metals via the exploration premium plan. The government was aware of the tailings generated from the mining and milling and of the disposal method used for such tailings. The government threatened seizure of the operations if certain conditions were not complied with by the mining companies.

3. The government was aware and approved the use of tailings as construction material for Interstate 90.

4. The Bureau of Land Management ("BLM") was involved in the dredging of the Cataldo area.

5. The United States is responsible for certain undisputed identified abandoned mines and unpatented mining claims located in the Basin.

6. Bureau of Mines ("BOM") was a sponsoring organization for an experimental study regarding approximately 500 tons of tailings that were **[**26]** moved to tailings ponds.

7. The United States government played an active role in metals exploration contracts in the Basin.

Court, the Court concludes from a legal perspective there was a lack of actual managerial control over the mines **[**92]** and mills and the threat of seizure does not support a finding of liability where such a threat was never triggered. The mines and mills were not forced to produce, instead the Defendants elected to produce to aid the war effort. The Defendant mining companies actually earned a profit under the government's economic incentives.

Moreover, the facts of the case relied upon by the mining companies is clearly distinguishable from the facts at bar. In *FMC Corporation v. United States Department of Commerce, 29 F.3d 833 (3rd Cir. 1994)*, the *en banc* panel agreed the United States was an operator during World War II. FMC involved a rayon factory and not mining operations. In FMC, the government controlled the supply and price of raw materials, the government supplied equipment to be used in the manufacturing process, the government acted **[*1130]** to ensure the facility retained an adequate labor force, the government participated in the management and supervision of the labor force, the government had the authority to remove workers who were incompetent or guilty of misconduct, the government controlled the price of the product as well who could purchase the product, the **[**93]** government required the company to stop making regular rayon and to start producing high tenacity rayon. The Court concluded these direct managerial activities by the United States of the persons who controlled the mechanisms causing pollution created liability for the United States.

In comparing FMC to the current case, the Court finds there are arguably significant differences in the amount of actual control exercised by the government. In the present case, the mining companies maintained actual control over the mines and mills; the mining companies hired and fired and supervised employees; the mining companies voluntarily decided to mine for metals and to participate in the premium price plans and quotas; the mining companies owned the equipment used in the mines and mills; the government set the price for metals, but did not control who could purchase the metals at the given prices; and the mining companies controlled the mechanisms creating the tailings and the disposal of the tailings.

In applying the actual control test in Bestfoods, the Court finds the government did not "manage, direct or conduct operations specifically related to pollution, that is, operations having **[**94]** to do with the leakage or disposal of hazardous waste, or decision about compliance with environmental regulations." Even applying the broader "authority to control" test in East Bay, the Court concludes the government did not exercise its authority to control the mines and mills during World War II. Therefore, the United States was not an owner/operator for purposes of CERCLA.

Finally, this Court has previously denied the affirmative defense that tailings occurred as a result of an act of war. See Order dated March 30, 2001, Docket No. 1101. This Court's analysis is also supported by the recent decision in *United States v. Shell Oil Co., 294 F.3d 1045, 1061-62 (9th Cir. 2002)*, cert. denied, *Atlantic Richfield Co. v. United States, 537 U.S. 1147, 154 L. Ed. 2d 849, 123 S. Ct. 850 (2003)*, cert. denied, *Shell Oil Co. v. United States, 537 U.S. 1147, 154 L. Ed. 2d 849, 123 S. Ct. 850 (2003)*.

C. ARRANGER LIABILITY

1. Arranger Standard.

Trustees argue arranger standard requires a person to: 1) own or possess waste and arrange for its disposal; or 2) exercise actual control over the disposal of waste. *Fast Bay Mun. Util. Dist. v. United States Dep't of Commerce, 948 F. Supp. 78, 93-95 (D. D.C. 1996)*. **[**95]** Defendants argue for broader definition of "arranger." CERCLA does not define "arranger," so the Court will look to case law for determination of when a party is an arranger.

Defendants argue arranger liability may extend to those with an indirect relationship with actual disposer. The Defendants cite the Court to *United States v. TIC Investment Corp., 68 F.3d 1082, 1089 (8th Cir. 1995)*(parent corporation officer could be liable as an arranger if "he or she had the authority to control and did in fact exercise actual or substantial control, directly or indirectly, over the arrangement for disposal, or the office site disposal, of hazardous substances").

The "issues involved in determining 'arranger' liability under CERCLA are distinct from those involved in determining 'owner' or 'operator' liability." *Cadillac* **[*1131]** *Fairview/California, Inc. v. United States, 41 F.3d 562, 564 (9th Cir. 1994)*. Applying Bestfoods in an arranger liability context, it appears arranger liability

requires active involvement in the arrangements of disposal of hazardous substances. *Carter-Jones Lumber Co. v. Dixie Distrib. Co., 166 F.3d 840, 846-47 (6th Cir. 1999)*. However, **[**96]** control is not a necessary factor in every arranger case. The Court must consider the totality of the circumstances of this case to determine whether the facts fit within CERCLA's remedial scheme. *United States v. Hercules, Inc., 247 F.3d 706 (8th Cir. 2001)*. Although the term "arranger" is to be given a liberal interpretation, there must be "nexus" that allows one to be labeled an arranger. *Geraghty and Miller, Inc. v. Conoco, Inc., 234 F.3d 917, 929 (5th Cir. 2000)* (nexus defined as "the obligation to exercise control over hazardous waste disposal, and not the mere ability to control the disposal").

An arranger is defined by *CERCLA in § 9607(a)(3)* as follows:

> any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of bazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances. (Emphasis added.) [24]

However, "arranged for" is not defined by the statute. "Congress has left this **[**97]** task to the courts, and the courts have at time struggled with the contours of 'arranger' liability under *§ 107(a)(3)*." *South Florida Water Management Dist. v. Montalvo, 84 F.3d 402, 406 (11th Cir. 1996)*. Some courts have looked to the definition of "disposal" for guidance. See *Tanglewood East Homeowners v. Charles-Thomas, Inc., 849 F.2d 1568, 1573 (5th Cir. 1988)* (liberal interpretation of "disposal").

> Congress used broad language in providing for liability for person who "by contract, agreement, or otherwise arranged for" the disposal of hazardous substances. See *A & F Materials, 582 F. Supp. 842, 845*. While the legislative history of CERCLA sheds little light on the intended meaning of this phrase, courts have concluded that a liberal judicial interpretation is consistent with CERCLAs "overwhelming remedial" statutory scheme. (Emphasis in original, footnotes and citations omitted.)

United States v. Aceto Agr. Chemicals Corp., 872 F.2d 1373, 1380 (8th Cir. 1989).

> 24 The Court notes the United States's post-trial brief cited the definition of arranger, but left out the critical phrase "by contract, agreement, or otherwise." This omission appears material to the analysis of whether or not the United States was an arranger when it contracted with the State of Idaho to pay for 92% of the construction of Interstate 90 and other arranger claims.

[98]** *Section 9601(24) of CERCLA* defines "disposal" as the same definition provided in § 1004 of the Solid Waste Disposal Act (*42 U.S.C. § 6903(3)*):

> the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

The Eleventh Circuit has set forth certain relevant factors used by courts in determining whether arranger liability is justified. *Concrete Sales and Services v. Blue Bird Body, 211 F.3d 1333, 1336-37 (11th Cir. 2000)*. The Eleventh Circuit **[*1132]** notes that none of the factors are dispositive of the issue. *211 F.3d at 1336*. The factors are:

(1) whether a sale involved the transfer of a "useful" or "waste" product;

(2) whether the party intended to dispose of a substance at the time of the transaction;

(3) whether the party made the "crucial decision" to place hazardous substances in the hands of a particular facility;

(4) whether the party had knowledge of the disposal; and

[99]** (5) whether the party owned the hazardous substances.

Id. at 1336-37.

In *United States v. Shell Oil Co., 294 F.3d 1045, 1055 (9th Cir. 2002)*, cert. denied, *Atlantic Richfield Co. v. United States, 537 U.S. 1147, 154 L. Ed. 2d 849, 123 S. Ct. 850 (2003)*, cert. denied, *Shell Oil Co. v. United States, 537 U.S. 1147, 154 L. Ed. 2d 849, 123 S. Ct. 850 (2003)*, (citing *Cadillac Fairview/Cal., Inc. v. United States, 41 F.3d 562 (9th Cir. 1994))*, the court held that a "traditional" direct arranger must have direct involvement in arrangements for the disposal of waste. The Court went on to discuss the case law which supports a broader arranger theory or indirect control theory. The Shell court determined that mere "authority to control" was insufficient without some actual exercise of control. This legal test is consistent with TIC Investment which required an officer to have exercised actual control over the arrangement for disposal. This test is also consistent with the Ninth Circuit's analysis of United States v. Northeastern Pharmaceutical & Chemical Co.,("NEPACCO"), *810 F.2d 726 (8th Cir. 1986), United States v. Aceto Agric. Chem. Corp., 872 F.2d 1373 (8th Cir. 1989).* **[**100]** *Shell 294 F.3d at 1057-59.*

The Court finds the applicable standard for liability as an arranger is the standard cited by the United States. Arranger liability requires a person to: 1) own or possess waste and arrange for its disposal; or 2) have the authority to control and to exercise some actual control over the disposal of waste.

2. World War II Liability.

Based on the earlier factual analysis of the government as an operator, the Court also finds the United States was not an arranger during World War II. In Shell, the Ninth Circuit held the facts were similar to *FMC Corp. v. United States Dep't of Commerce, 29 F.3d 833, (3rd Cir. 1994)*(en banc) and *United States v. Vertac Chem. Corp., 46 F.3d 803 (8th Cir. 1995)* wherein the other circuits held the United States was not an arranger under *§ 9607(a)*(30 when the "manufacturing was carried out under government contracts and pursuant to government programs that gave it priority over other manufacturing; in both cases, the companies voluntarily entered into the contracts and profited from the sale; and in both cases, the United States was aware that waste was being produced, but did not direct **[**101]** the manner in which the companies disposed of it." *Shell 294 F.3d at 1059*. These are similar facts to the facts presented to this Court regarding the United States' control during World War II. In the present case, the Court finds the United States did not own or possess waste or arrange for its disposal during World War II and the United States did not exercise actual control over the disposal of mining tailings. Furthermore, the factors set forth in Concrete Sales do not lead to a conclusion the United States was an arranger during World War II.

3. Interstate 90 Construction.

As to the construction of Interstate 90, the Court finds the United States **[*1133]** was an arranger. The federal government contends that even though it paid 92% of the construction costs, exercised the ultimate authority approval over the PS&E right down to change orders of less that $ 1,000, conducted audits and investigations on a regular basis, that it nevertheless was the state of Idaho that had primary day to day supervision of the construction on 1-90. Even though the CERCLA statute leaves much to be desired, the Court does not believe or find that Congress intended that a responsible party could avoid liability **[**102]** by simply having an independent contractor physically do a job that it would otherwise be responsible for. The Court is confident that most businessmen or even lay taxpayers would not buy into the argument that their tax dollars were paying 92% of the costs of something of this magnitude, but the agencies responsible did not know or oversee what construction materials were being used. Millions of cubic yards of tailings were used to line the roadbed and embankments containing thousands of tons of lead and zinc. If the federal government's argument is that it did not know it would he such a problem and that it is being asked to be responsible with hindsight, this whole case could make the same argument. The evidence established that the Federal Highway Agency in charge approved the use of tailings as borrow areas and as source material for construction even though the state of Idaho contractor may have selected the same. This was a joint venture or understanding with joint management and control by both the state of Idaho and the federal government.

Under a Bestfoods analysis, the fact that one party may be the primary operator or manager makes little difference. While Lady Justice **[**103]** is depicted with blinders on, it was never intended that she turn her head so that she couldn't sec what was going on. Neither can

the federal government turn its head to avoid liability for its actions. Arranger liability requires a person to: 1) own or possess waste and arrange for its disposal; or 2) have the authority to control and to exercise some actual control over the disposal of waste and the United States did both during the construction of I-90. The burden is now on the Defendants to establish the qualitites of fill used were significant enough to be a contributing factor in the Basin.

4. Cataldo Dredge.

Evidence was presented during trial that BLM was involved in the dredging of the Cataldo area. The Court finds that the federal government agency was one of many arrangers of mining tailings when dredging the Cataldo area. However, the dredging did not "generate" tailings. Rather the dredging removed many tailings from the waterways. The Defendants must establish that the dredging of tailings was a contributing factor to the harm alleged in the Basin before something other than a zero allocation for this activity can be considered by the Court.

5.Abandoned Mines **[**104]** and Owner of Unpatented Mining Claims.

Evidence was presented at trial that the federal government is currently responsible for certain abandoned mines that contributed hazardous substances into the Basin. The Court finds that the United States does not become an "arranger" or "owner" for purposes of CERCLA for mining activities done by defunct mining companies.

The United States is also not an "arranger" or "owner" for mining activities of unpatented mining claims. This Court agrees with the court in *United States v. Friedland, 152 F. Supp. 2d 1234 (D. Colo. 2001),* that the United States' interest in lands subject to unpatented mining claims does not make it an "owner" of such mining **[*1134]** claims under CERCLA. Prior to the passage of Federal Land Policy and Management Act of 1976, *43 U.S.C. § 1701 et seq.*, the BLM did not have authority to regulate mining activities and environmental damage that may flow from such mining activities. Defendants have failed to establish that after 1976, the BLM failed to regulate the mining activities or arranged for the disposal of tailings from unparented mining claims.

Moreover, the quantity of any releases **[**105]** from the abandoned mines and unpatented mining claims are so minimal, that a zero allocation would be applied by the Court if the United States was in any way liable for such activities.

6. Bureau of Mines Reclamation Study.

Defendants seek to hold the United States liable as an arranger of hazardous substances based on the involvement of the Bureau of Mines ("BOM") in a floodplain reclamation study in the early 1980s. BOM was the "sponsoring organization" for an experimental study of how land impacted by tailings could be reclaimed by moving tailings to tailings ponds. Approximately 500 tons of tailings which were historically generated by the mining activities were moved to 2 lined and 2 unlined tailings ponds.

There is no dispute that the study was not proposed by BOM. Rather, the study was proposed by the Greater Shoshone County, Inc. ("GSCI"). GSCI was a group of mining companies and other businesses seeking to improve Shoshone County. Dames and Moore was hired as the subcontractor of the study and was responsible for the design, management and implementation of the study. As the "sponsoring organization," BOM approved and funded the study. The study was implemented to **[**106]** reduce the environmental impact of the tailings. This activity is not the type of action intended by Congress to create arranger liability. BOM did not control or arrange for the disposal of the tailings. Moreover, the Defendants failed to establish the 500 tons of tailings involved in this project were a contributing factor to the injury to natural resources in the Basin.

In making this determination, the Court analogizes the study to regulatory exceptions to CERCLA. If the government is performing response actions or remedial action on a site, this cleanup action by the government would immune it from CERCLA liability. This impoundment funded by the BOM has not been shown to have been a contributing factor to releases and the Court would allocate a zero allocation to the study if it was found by the appellate court to create arranger liability.

7. Exploration Contracts by DMEA and BOM.

The Court finds that the exploration contracts and activities undertaken by the BOM during World War II do create arranger liability for the United States. The United States knew or should have known that the

exploration would create mining tailings. The government encouraged the generation **[**107]** of tailings from the exploration. The United States does dispute this finding, but claims it should receive a zero allocation for these activities. The experts testified at trial the amount of tailings involved in the exploration activities was a "minuscule, very, very, very tiny" amount. The Defendants will have to prove by a preponderance of the evidence that the amount of tailings produced via these exploration activities is in an amount large enough for such tailings to be a contributing factor for causation purposes.

D. Third Party Defense

Defendants argue that the United States is not entitled to the third party **[*1135]** defense provided in CERCLA. CERCLA's third party defense requires the United States to prove by a preponderance of the evidence, that a third party was the "sole cause" of the release of a hazardous substance, the third party was not the government's employee or agent, the act or omission by the third party did not occur in connection with a contractual relationship with the government and the government exercised due care and took reasonable precautions against foreseeable acts and omissions. *42 U.S.C. § 9607(b)(3)*. The Court agrees **[**108]** that as to the areas where the United States has been found to have arranger liability as discussed above, the United States has not established that releases were the "sole cause" of a third party and would not be entitled to the defense.

The Court disagrees that the United States failed to exercise due care and reasonable precautions in regards to land owned by the federal government or to require actions by other downstream landowners. Defendants argue that the United States is liable for downstream lands wherein hazardous substances have come to be located due to the government's failure to require that landowners protect their land from tailings flowing onto their property. This argument is meritless. First, the amount of land owned by the federal government in the 100 year floodplain is minimal and it has not been shown that releases occurred from federal government land. Second, it is unrealistic to believe a third party has to take action to protect their property where the consequence of taking the suggested action is to make the impact of the tailings downstream even worse. Third, easements were entered into by third party landowners and the mining companies that allowed **[**109]** the mining companies to deposit tailings on their land. *Gross v. Bunker Hill & Sullivan Mining & Concentrating Co., 45 F.2d 651 (D. Idaho 1930)*. The United States had no control over the contractual agreements entered into by the parties.

V. CONCLUSION

In applying the elements of the requisite causes of action, the Court finds that Plaintiffs have established Defendants' liability for their claims for response costs and for damages to natural resources under CERCLA and as well as damages under the CWA. The matter will proceed to trial to quantify the damages in this case.

VI. ORDER

Being fully advised in the premises, the Court hereby orders that consistent with this Order, liability has been established by the Trustees. The Court will proceed to the next phase of this trial. The parties are to submit a joint scheduling order to the Court within thirty (30) days of the date of this Order. The scheduling order deadlines shall be based on a trial date for the damages portion of this trial set to begin on May 11, 2004.

ORDERED this 3rd day of September, 2003.

EDWARD J. LODGE

UNITED STATES DISTRICT JUDGE